

FIG. 1A (PRIOR ART)

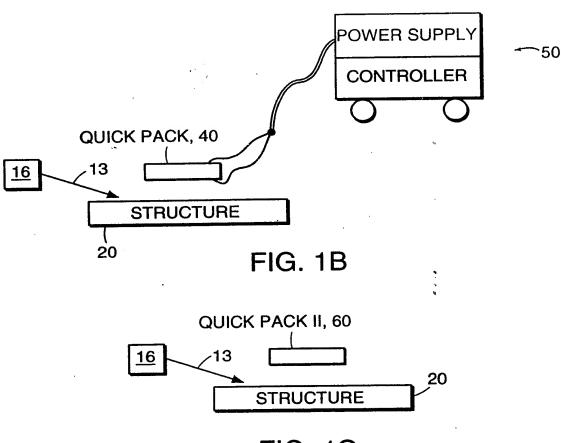
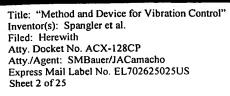


FIG. 1C

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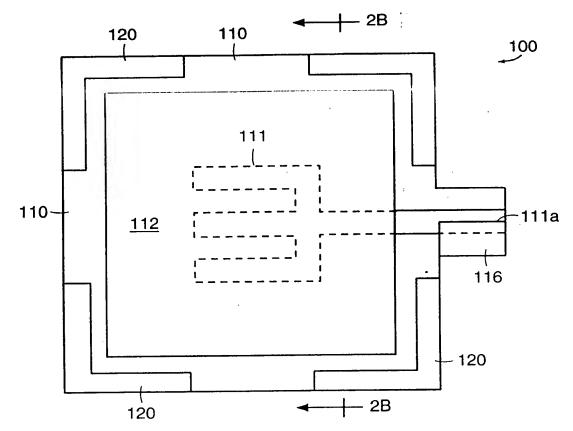


FIG. 2A

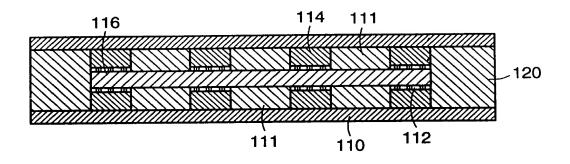
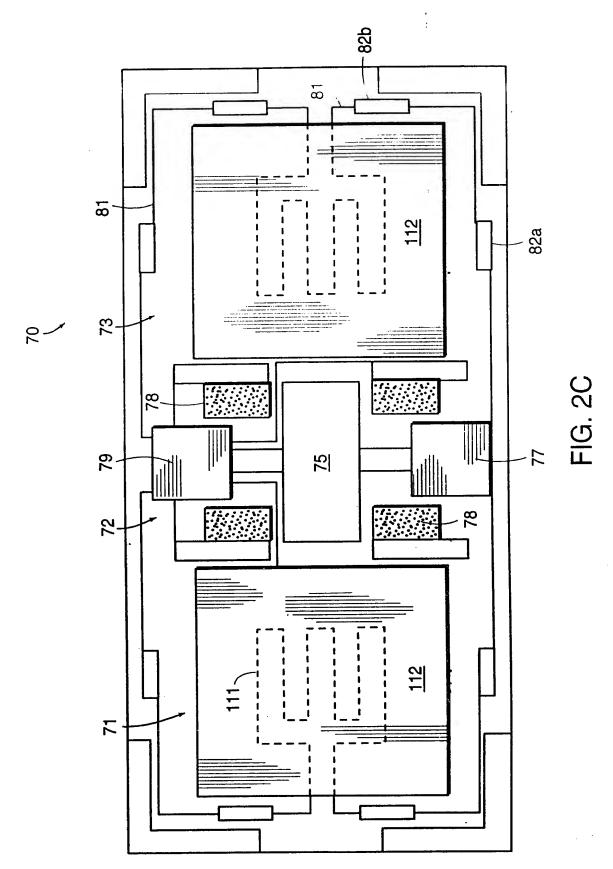
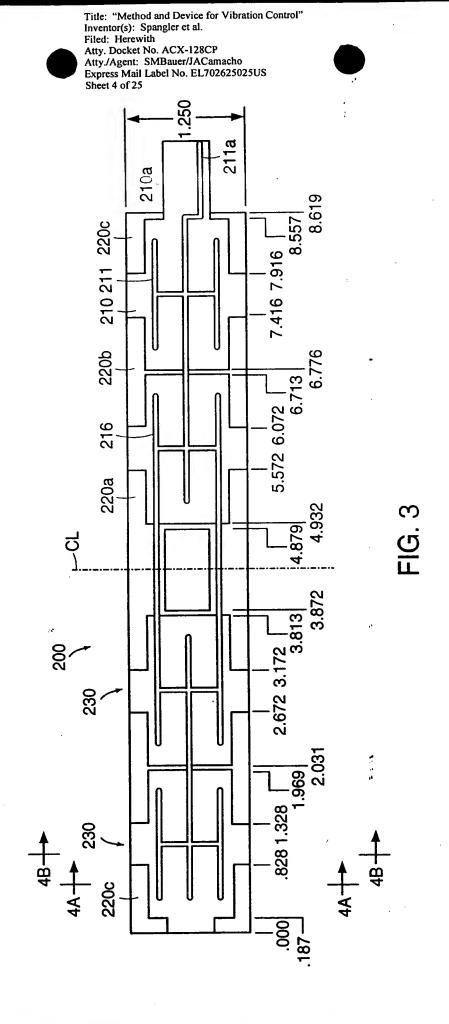
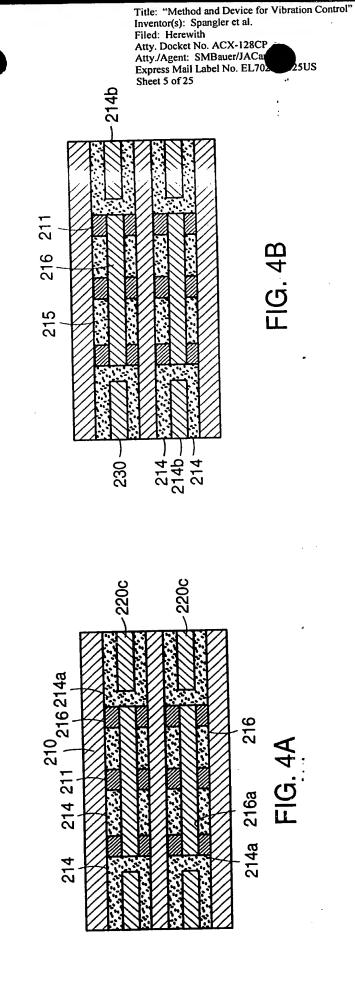


FIG. 2B

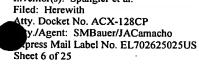
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Filed: Herewith
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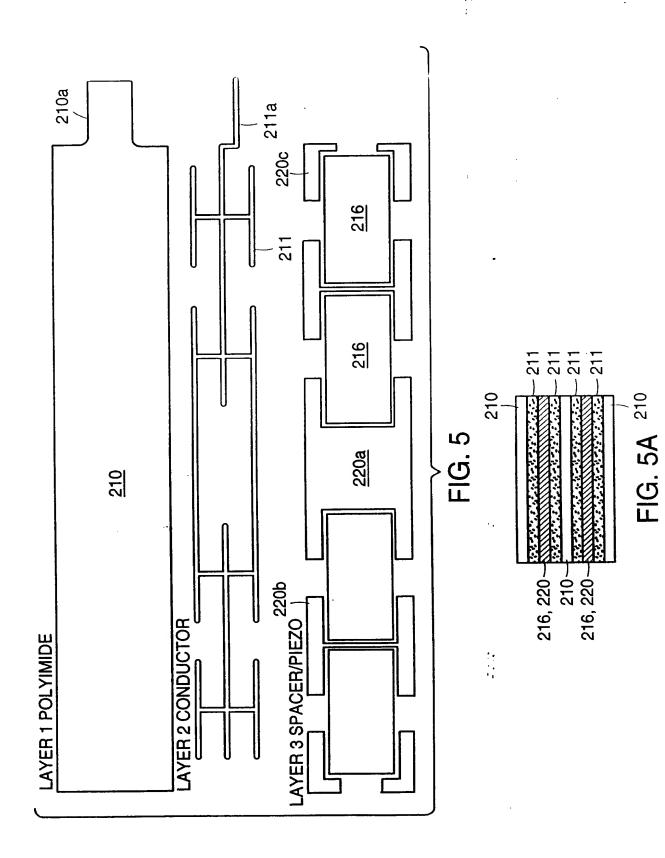






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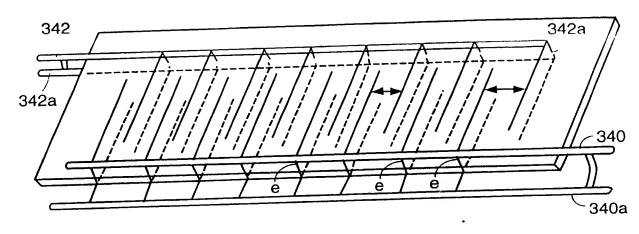


FIG. 6

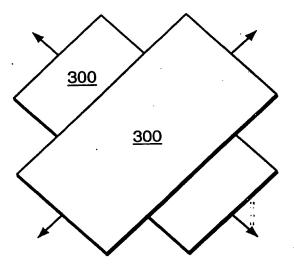


FIG. 7

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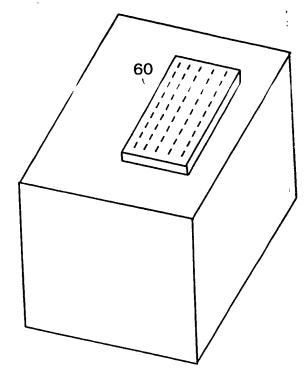


FIG. 8A

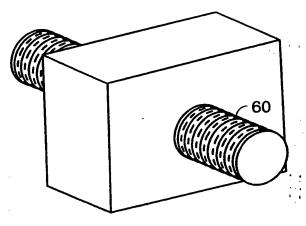


FIG. 8B

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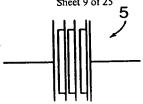


FIG. 9A

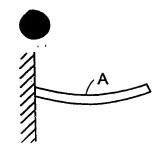


FIG. 9B



FIG. 9C

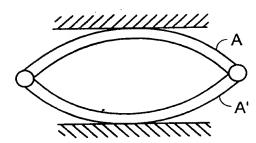


FIG. 9D

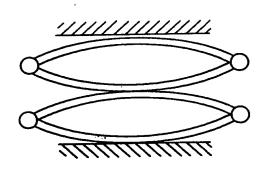


FIG. 9E

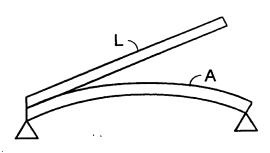


FIG. 9F

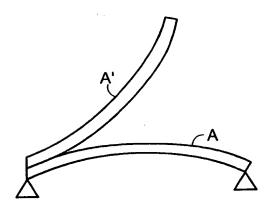


FIG. 9G

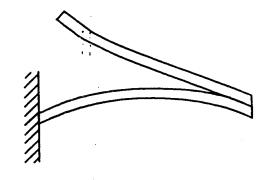


FIG. 9H

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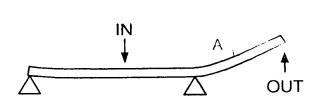
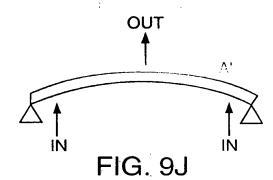


FIG. 91



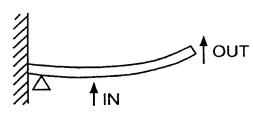


FIG. 9K

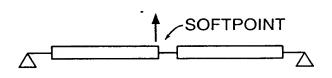


FIG. 9L

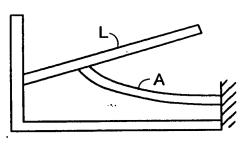


FIG. 9M

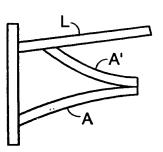
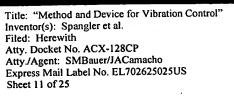
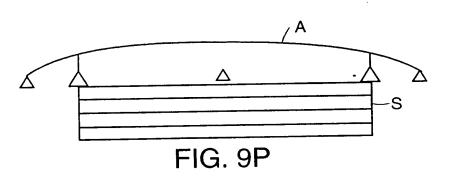


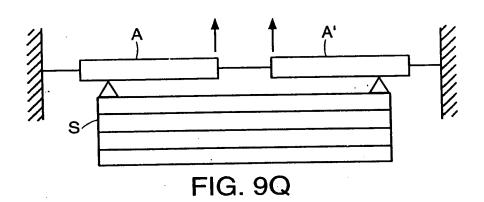
FIG. 9N



FIG. 90



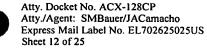




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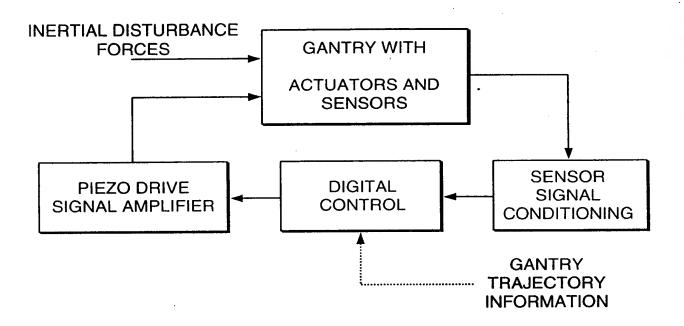


FIG. 10

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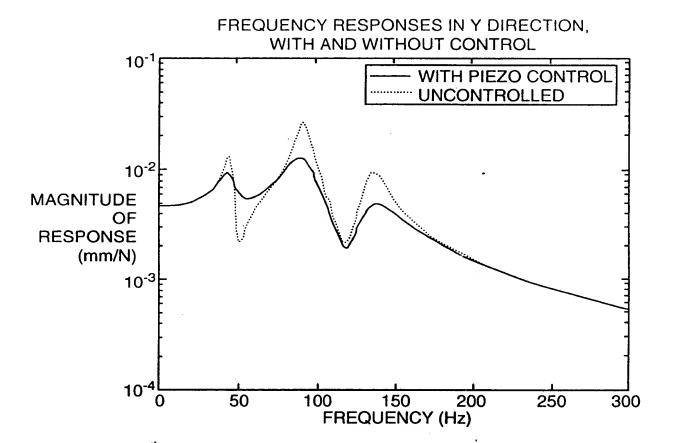


FIG. 11

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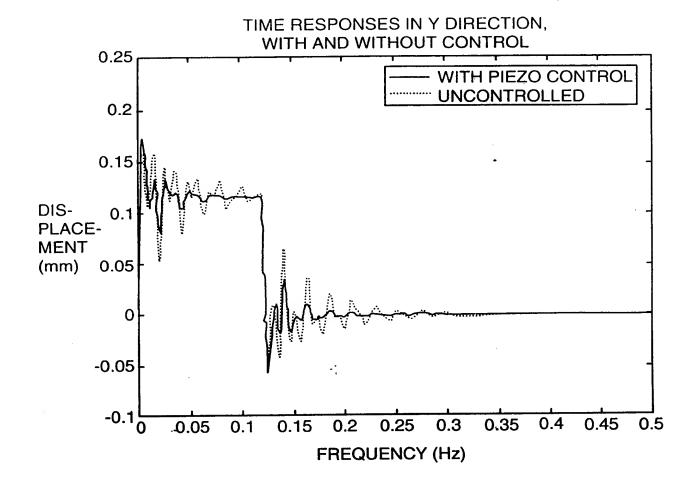


FIG. 12

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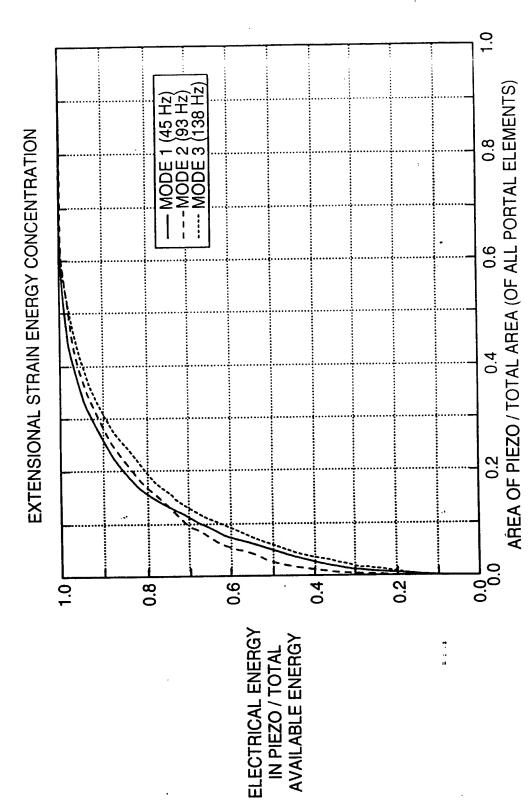
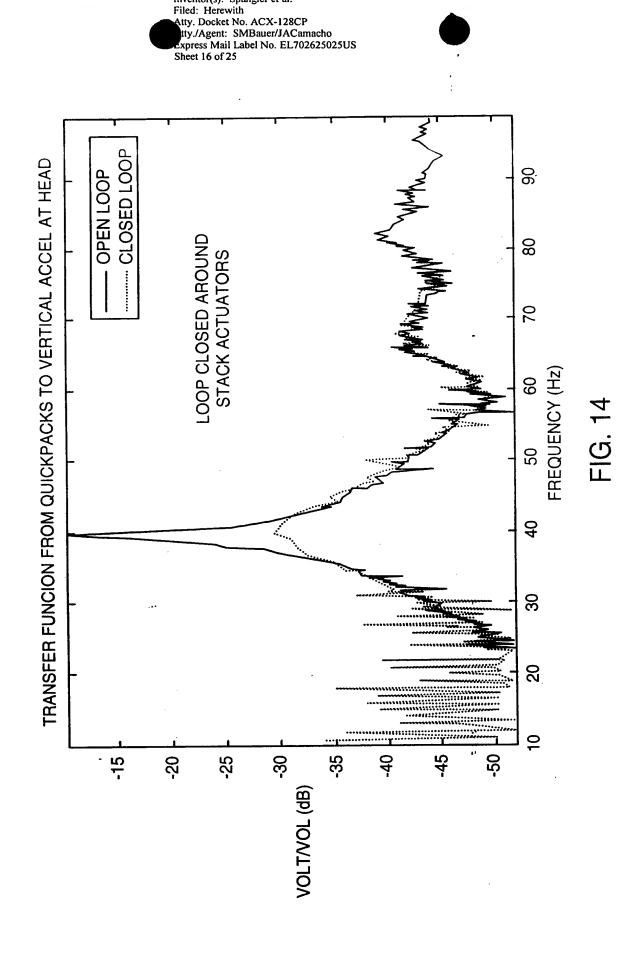


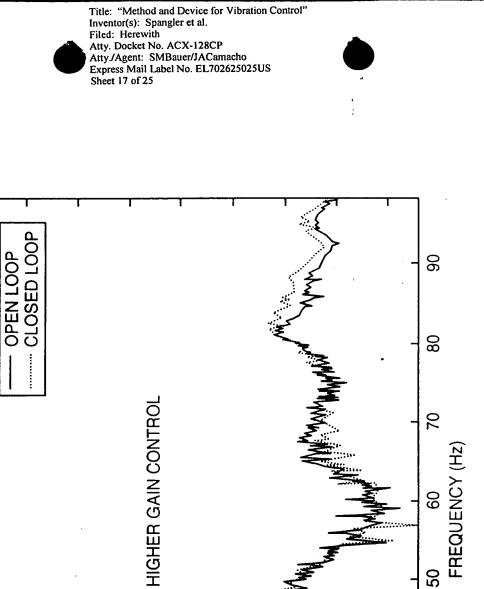
FIG. 13



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TRANSFER FUNCTION FROM QUICKPACKS TO VERTICAL ACCEL AT HEAD



-30 -VOLT/VOLT (dB)

-35

<del>?</del>

-45

-25

-50

-15

FIG. 15

9

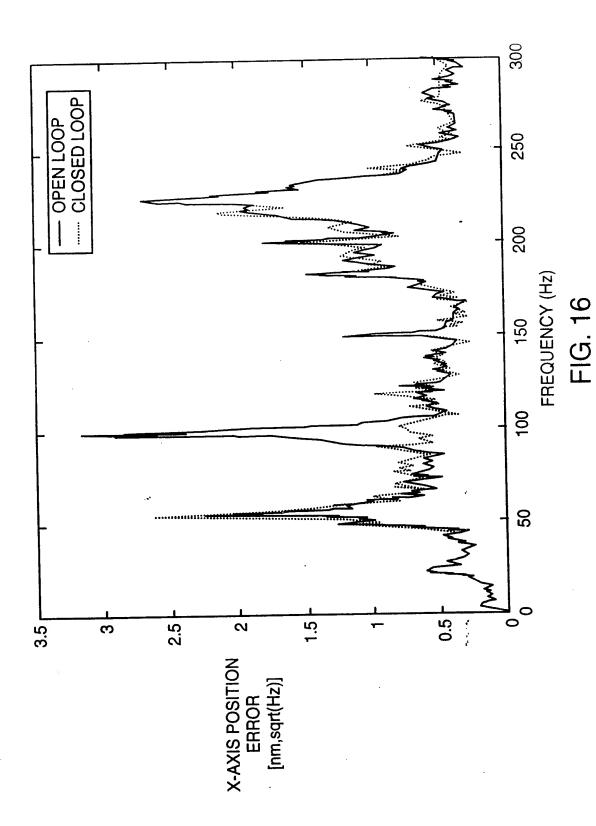
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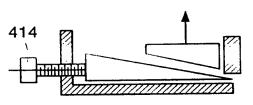


FIG. 17

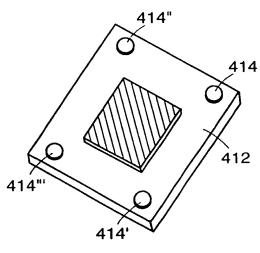
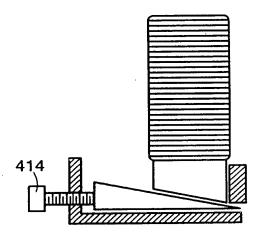


FIG. 18



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FIG. 19

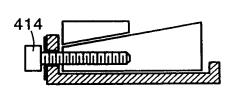
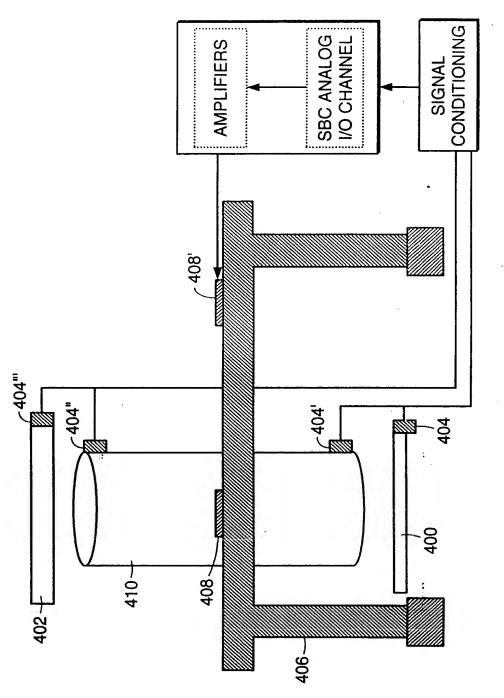


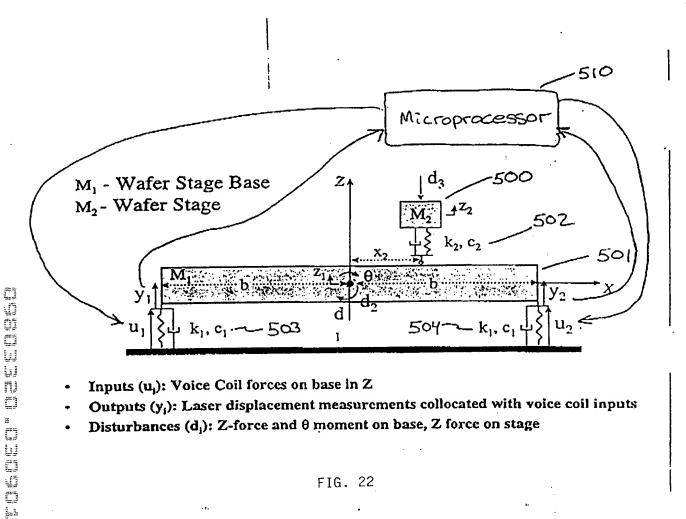
FIG. 20

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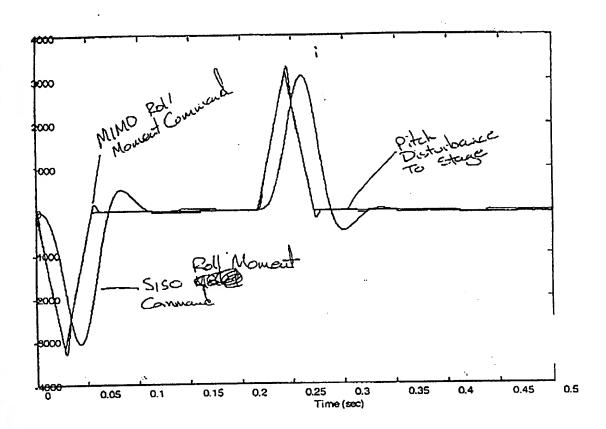


- Inputs (ui): Voice Coil forces on base in Z
- Outputs (yi): Laser displacement measurements collocated with voice coil inputs
- Disturbances (di): Z-force and θ moment on base, Z force on stage

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.FIG. 23

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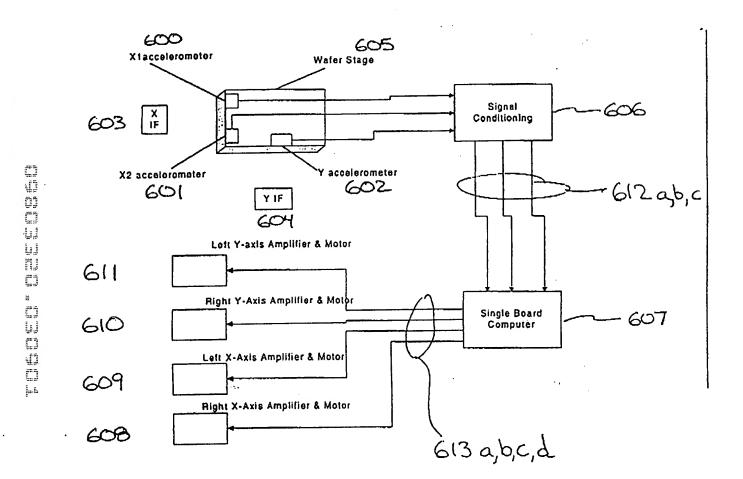


FIG. 24

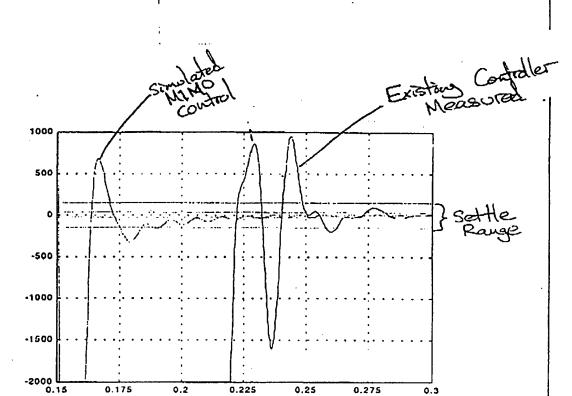
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0.25

0.275

0.3

FIG. 26

0.2

0.225